

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,994	10/15/2003	James B. Prichard	13039:239 (CRAN01-00239)	5835
23990 DOCKET CLE	7590 05/15/200 CRK	7	EXAMINER	
P.O. DRAWER	R 800889		KUMAR, RAKESH	
DALLAS, TX	/5380	•	ART UNIT	PAPER NUMBER
			3654	
			MAIL DATE	DELIVERY MODE
			05/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		<u></u>				
	Application No.	Applicant(s)				
Office Action Summany	10/685,994	PRICHARD ET AL.				
Office Action Summary	Examiner	Art Unit				
The MAILING DATE of this communication app	Rakesh Kumar	3654				
Period for Reply	ears on the cover sheet with the t	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period way reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from 1, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on <u>Amendment filed 02/08/2007</u> .						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-20 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
, <del>_</del>	5) Claim(s) is/are allowed.					
6) Claim(s) <u>1-20</u> is/are rejected.						
7) Claim(s) is/are objected to.	r election requirement					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>18 June 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
	anning Ivolo tilo attached ome					
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>						
3. Copies of the certified copies of the priority documents have been received in Application No						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date  5) Notice of Informal Patent Application					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 12/04/2006.	6) Other:					

#### **Final Rejection**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6 and 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falk et al. (U.S. Patent Number 5,285,926) in view of Krakauer (U.S. Patent Number 4,317,604).

Referring to claims 1 and 3. Falk discloses a merchandising system (10; Figure 10) comprising:

at least one tray (42) including one or more mounting supports (44) for mounting the tray (42) on a support (36) within a vending machine (10),

the tray (42) having a periphery defined by an inner edge (86) proximal to the support (34) when mounted, an outer edge (84) distal from the support (34) when mounted, and two radial edges (edges 70 extending on either side of tray; Figure 4) extending between the inner edge (86) and the outer edge (84),

the tray (42) adapted to be divided into a plurality of tray zones (see Figure 4) by one or more tray subdivides (90) that may be selectively mounted in any of the two predetermined positions (see predetermined positions disposed on the tray by members 88 and 82; Figure 4),

wherein the tray (42) includes at least one of a slot (88) or a guide (82) selectively receiving a tray subdivider (90) separating one tray zone from another (Col 6 lines 29-40, Col 7 lines 31-47).

Futhermore, Falk discloses a merchandising system (10) where the trays (42) are divided into tray zones (Figure 4, area in between dividers 90) that are one or more of equal or unequal sizes depending on the location of the subdividers (90) positioned in tray (42). Faulk discloses the subdivides (90) disposed in predetermined positions being radially projecting from a center emanating from the inner edge (see inner edge located at top area in Figure 4 where members 88 are disposed) to an outer edge (see outer edge of tray 42).

Falk discloses the partitioning subdividers (90) disposed in a radial orientation in the tray (42) however, Faulk does not disclose the partitioning subdividers (90) to be positioned in a radially askew orientation in the tray.

Krakauer discloses a vending machine apparatus (Figure 1) wherein partitioning subdividers (96) in a tray (Figure 4) positioned in a radially askew orientation in the tray (Figure 4, 5; Col 5 line 62-Col 6 line 15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Falk to include subdividers positioned in a radially askew orientation in a tray as taught by Krakauer because positioning subdividers is an askew orientation would reduce wastage of tray space.

It would have been further obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Falk in view of Krakauer to position subdividers in a radially askew orientation wherein the subdivider extend from the inner central portion of the tray to a position on the outer edge of the tray, thus the subdividers are disposed in a radially askew direction to the central support column of the vending machine in order to further customize the tray zone sizes.

Referring to claims 2. Falk discloses a merchandising system (10) wherein the tray (42) includes a plurality of slots (88), a plurality of guides (82; Figure 4), or both selectively receiving a plurality of tray subdividers (90) separating at least three zones on the tray (42).

Regarding claim 4. See claim 1 rejection above. Falk discloses a merchandising system (10) further comprising:

a center support member (34) on which the at least one tray (42) is mounted; and a vend door (12) disposed proximate to an outer edge of the at least one tray (42), wherein the vend door (12) is selectively movable between a closed position and an

Art Unit: 3654

open position, wherein the vend door (12), when in the open position, permits access to only one tray zone (Figure 1, 2; Col 5. line 50-65, Col 8 line 29-36).

Referring to claim 5. Falk discloses a merchandising system (10) further comprising:

a the center support member (34);

a plurality of trays (42) each including one or more mounting supports (44; Figure 2) for mounting the tray (42) on a support (34) within a vending machine, the plurality of trays (42) mounted on the center support member (34) and including at least one tray, wherein the trays are mounted at each level (40) of nine levels (Figure 1; Col 6 lines 29-45; there are nine tray levels 40 shown) spaced apart evenly;

a vend door (12; Figure 2) disposed at each level (see vend doors 12 at each level in Figure 1) proximate to an outer edge of one of the trays at that level (see position of door 12; Figure 2), wherein the door (12) is selectively movable between a closed position and an open position (see handle 18; Figure 2),

wherein each tray (42) may be divided into up to five tray zones (in Falk there are six zones),

wherein the vend door (12), when in the open position, permits access to only one tray zone of the one tray, and

and wherein the center support member (34) may be selectively rotated to position any selected tray zone on any of the plurality trays proximate to the vend door (12) so that the selected tray zone is accessible when the vend door (12) is in the open

Art Unit: 3654

position (Col 2 line 11-25, Col 3 line 8, Col 4 line 15). In addition Falk discloses associating prices individually with each tray zone on each tray at each level (Col 3 line 32-38; Col 4 line 39-46).

Falk discloses mounting six trays, but does not specifically disclose mounting only five trays to the center support member (34), in addition Falk does not disclose each level of the trays to be five inches apart.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Falk in view of Krakauer to include only five trays at each level on the center support member (34) versus six trays as specifically taught by Falk (also see 7 trays taught in Krakauer; Figure 2) because a five tray vending machine would be smaller in size and thus require a smaller footprint.

It would have been further obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Falk in view of Krakauer to include a distance between each level of the tray platform to be five inches apart. Such a selection would represent a mere design choice of space required for displaying the target items and be well within the level of skill of an artisan.

Referring to claim 6. Falk discloses a merchandising system (10)

wherein a distance between the open and closed positions (Col 5 line 57) for the vend door (12) is defined by at least one tray (42) subdividers (70) or (90) (Figure 3; Col

8 line 27-40). The subdividers as disclosed can comprise different size zones thus changing the opening clearance.

Referring to claim 8. Falk discloses an enclosure (16) having an opening within at least a sidewall, wherein the vend door (12) is positioned over a portion of the opening when in the closed position (Figure 2);

a motor (106) for rotating the center support member (34); and controls that (Col 3 line 11; Col 10 line 65), when actuated (Col 4 line 15), rotate the center support member (34) to position a selected tray zone proximate to the vend door (24; Col 8 line 27-37).

Referring to claims 9. See claim rejections 1 and 4. Falk discloses a merchandising system (10) further comprising:

a plurality of trays (42), including the at least one tray (42), each mounted on the center support member (34) at one of a plurality of different levels (40), each tray (42) adapted to be divided into a plurality of tray equal and unequal zones (Figure 4) and including at least one of a slot (88) or a guide (82) selectively receiving a tray subdivider (90) separating one tray zone from another (Figure 2 and 4);

and a plurality of vend doors (12; Figure 1), including the vend door (12), each associated with a different level (40) and each separately selectively movable between an open position and a closed position (Col 5 line 1-65), wherein each vend door (12),

when in the open position, permits access to only one tray zone on a corresponding tray (Col 8 line 36).

Regarding method claims10-15, although Falk in view of Krakauer does not explicitly disclose a method of using his apparatus, the method steps recited in the claim would inherently be performed when using the apparatus of Falk in view of Krakauer in its usual and expected fashion.

Claims 7 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falk in view of Krakauer and further in view of Varley (U.S. Patent Number 5,313,393).

Referring to claims 7 and 19. See claims rejections above. Falk discloses using a microprocessor to control a solenoid (110) to activate the removal of a plunger (112) disposed in a corresponding series of holes associated with each possible position of the partitioning tray wall dividers (70) and subdividers (70) to exactly register with the appropriate vend door (12) access (Col 8 line 34).

Falk et al. does not disclose using a catch on a tray subdivider for controlling the distance of the vend door opening.

Varley discloses a tray latch pin (57) (a catch) disposed on the outer surface of the tray (43) positioned to coincide with the position of each divider on the tray separating the compartment. Tray latch pin (57) acts in conjunction with a user access

Art Unit: 3654

door latch (61) to provide a vend door (37) open access to the corresponding tray zone (Figure 4 and 5).

Varley teaches of positioning the catch mechanism on the outside of the level tray (Figure 5) but does not disclose positioning the tray latch pin (57) on the partition subdividers dividers.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Falk in view of Krakauer and Varley to include (incorporate) latch pins disposed on the subdividers to control the size of access to proximate to the position of the location of the subdividers because the control mechanism will not be need to be calibrated once the sizes of the tray zones is changed as different size products are set to be displayed.

Regarding method claim 16 (see claim rejection 13), although Falk in view of Krakauer and Varley does not explicitly disclose a method of using his apparatus, the method steps recited in the claim would inherently be performed when using the apparatus of Falk in view of Krakauer and Varley in its usual and expected fashion.

Referring to claim 17. See claim rejections above. Falk discloses a merchandising system (10) comprising:

an enclosure (comprising component members 16, 12, 18 and 32) around at least a portion of a drum perimeter (30);

a center support member (34) within the enclosure (comprising component members 16, 12, 18 and 32);

at least one tray (42) mounted on the center support member (34) at each of a plurality of different levels (40); each tray (42) logically divided into a plurality of tray zones (Figure 4);

at least one tray (42) subdivider (90) received by at least one of a slot (88) or a guide (82) on at least one of the trays (42), the tray (42) subdivider (70) separating one tray zone on the at least one of the trays from another; and

a vend door (12) disposed proximate to an opening through the enclosure (comprising component members 16, 12, 18 and 32)at each of the different levels (40), each vend door (12) corresponding to the at least one of the trays (42) having a tray subdivider (90), selectively movable between an open position and a closed position,

wherein the vend door (12), when in an open position, and the tray subdivider (90) permit access to only one tray zone on a corresponding tray (42).

Regarding claim 18, see claim rejection 9.

Regarding claim 20, see claim rejection 1 and above.

## Response to Arguments

Applicant's arguments filed 02/08/2007 have been fully considered but they are not persuasive, see rejections above.

In response to applicant's argument that the prior art lacks motivation to combine, the test for obviousness is not whether the features of a secondary reference may be

bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

The applicant argues independent claims 1, 10 and 17 each recite a "radially askew tray subdivider", the argument further defines the radially askew tray subdividers extending from "an inner edge to an outer edge of the tray" as recited in the claim limitations thus the applicant believes the claimed subject matter traverses the prior rejection a applied in the Office Action.

It is in the view of the Office that the prior art Falk in view of Krakauer firstly, teaches of a subdivider (96) as being disposed in a radially askew manner as can be seen in Figure 4 (Krakauer), secondly the radialy askew subdivider extends from an inner edge (see the inner edge of tray 92 in vicinity of member 104; Figure 4 Krakauer) to an outer edge of the tray at member (66). It is thus in the view of the Office that the cited prior art read of the claimed subject matter as claimed.

Regarding claim 5 and 7 the applicant argues "specific combination of the number of trays per level and trays, level spacing and the number of tray zones" as disclosed are not taught by the cited prior art.

It is in the view of the Office that the prior art of Falk in view of Krakauer teaches of various combinations of the tray configurations. It would have been obvious to one of

ordinary skill in the art of time the invention was made to have modified teaches as claimed, see rejections above.

#### Conclusion

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Chabout (US 6,068,158) discloses a radially askew subdivider (44b; Figure 4A)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rakesh Kumar whose telephone number is (517) 272-8314. The examiner can normally be reached on 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see

http://pair-direct.uspto.gov.

Art Unit: 3654

Page 13

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RK

May 14, 2007

GENEO. GRAWFORD

SUPERVISORY PATENT EXAMINER